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35 40 45

Pro Pro Gln Met Cys Arg Val Ala Cys Thr Cys Ala Val Ile Asn Arg
50 55 60

Val Gln Lys Val Asn Cys Thr Pro Thr Ser Asn Ala Val Cys Gly Asp
65 70 75 80

Cys Leu Pro Arg Phe Tyr Arg Lys Thr Arg Ile Gly Gly Leu Gln Asp
85 90 95

Gln Glu Cys Ile Pro Cys Thr Lys Gln Thr Pro Thr Ser Glu Val Gln
100 105 110

Cys Ala Phe Gln Leu Ser Leu Val Glu Ala Asp Ala Pro Thr Val Pro
115 120 125

Pro Gln Glu Ala Thr Leu Val Ala Leu Val Ser Ser Leu Leu Val Val
130 135 140

Phe Thr Leu Ala Phe Leu Gly Leu Phe Phe Leu Tyr Cys Lys Gln Phe
145 150 155 160

Phe Asn Arg His Cys Gln Arg Gly Gly Leu Leu Gln Phe Glu Ala Asp
165 170 175

Lys Thr Ala Lys Glu Glu Ser Leu Phe Pro Val Pro Pro Ser Lys Glu
180 185 190

Thr Ser Ala Glu Ser Gln Val Ser Trp Ala Pro Gly Ser Leu Ala Gln
195 200 205

Leu Phe Ser Leu Asp Ser Val Pro Ile Pro Gln Gln Gln Gln Gly Pro
210 215 220

Glu Met
225

<210> 6
<211> 461
<212> PRT
<213> Homo sapiens

<400> 6
Met Ala Pro Val Ala Val Trp Ala Ala Leu Ala Val Gly Leu Glu Leu
1 5 10 15

Trp Ala Ala Ala His Ala Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr
20 25 30

Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln
35 40 45

Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys
50 55 60

Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp
65 70 75 80

Ala Ser Ser Thr Met Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro
405 410 415
Lys Asp Glu Gln Val Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser
420 425 430
Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro
435 440 445
Leu Pro Leu Gly Val Pro Asp Ala Gly Met Lys Pro Ser
450 455 460

<210> 7
<211> 159
<212> PRT
<213> Homo sapiens

<400> 7
Met Ser Thr Gly Thr Asn Gly Asp Gly Val Ser Pro Ala Asn Gly Val
1 5 10 15
Val Leu Asp Arg Ser Tyr Pro Arg Ile Val Val Met Glu Arg Val Glu
20 25 30
Met Pro Thr Ala Gln Pro Ala Leu Leu Ala Val Gln Lys Gln Leu Gly
35 40 45
Pro Pro Gln Met Cys Arg Val Ala Cys Thr Cys Ala Val Ile Asn Arg
50 55 60
Val Gln Lys Val Asn Cys Thr Pro Thr Ser Asn Ala Val Cys Gly Asp
65 70 75 80
Cys Leu Pro Arg Phe Tyr Arg Lys Thr Arg Ile Gly Gly Leu Gln Asp
85 90 95
Gln Glu Cys Ile Pro Cys Thr Lys Gln Thr Pro Thr Ser Glu Val Gln
100 105 110
Cys Ala Phe Gln Leu Ser Leu Val Glu Ala Asp Ala Pro Thr Val Pro
115 120 125
Pro Gln Glu Ala Thr Leu Val Ala Leu Val Ser Ser Leu Leu Val Val
130 135 140
Phe Thr Leu Ala Phe Leu Gly Leu Phe Phe Leu Tyr Cys Lys Gln
145 150 155

<210> 8
<211> 342
<212> DNA
<213> Homo sapiens

<220>
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<222> (28)
<223> n equals a,t,g, or c

<220>
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 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (40)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (181)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (276)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (282)
 <223> n equals a,t,g, or c

<400> 8
 ggaccttgag ggggcagtga agctgctngc ntctggtgtn aagacccact gccacccctg 60
 caaccaggc ttcttcaaaa ccaacaacag cacctgccag ccttgcccat atggttccta 120
 ctccaatggc tcagactgta cccgctgccc tgcagggact gaacctgctg tgggatttga 180
 ntacaaatgg tggaacacgc tgcccacaaa catggaaacg accgttctca gtgggatcaa 240
 cttcgagtac aagggcatga caggctggga ggtggntggt gntcacattt acacagctgc 300
 tggagcctca gacaatgact tcatgattct aaatctggtt gt 342

<210> 9
 <211> 291
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (244)
 <223> n equals a, t, g or c

<400> 9
 ctctgtgga gacgtggaaa gggtccaaag gcaaacagtc ctatacctac atcattgagg 60
 agaacactac cagagcttc acctgggcct tccagaggac cacttttcat gaggcaagca 120
 ggaagtacac caatgacgtt gccaagatct actccatcaa tgtcaccaat gttatgaatg 180
 gcgtggcctc ctactgccgt ccctgtgccc tagaagcctc tgatgtgggc tcctcctgca 240
 cctnttgtcc tgctggttac tatattgacc gagattcagg aacctgccac t 291

<210> 10
<211> 267
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (171)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (207)
<223> n equals a,t,g, or c

<400> 10
ccaagatcta ctccatcaat gtcaccaatg ttatgaatgg ngaggcctcc tactgccgtc 60
cctgtgccct agaagcctct gatgtgggct cctcctgcac ctcttgctct gctgggtact 120
atattgaccg agattcagga acctgccact cctgcccccc taacacaatt ntgaagagccc 180
accagcctta tgggtgtccag gcctgtntgc cctgtgggtcc agggaccaag aacaacaaga 240
tccactctct gtgctacaat gattgca 267

<210> 11
<211> 274
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (107)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (196)
<223> n equals a,t,g, or c

<400> 11
aaagaatcaa aaactagagt acaagtactc caagctgggtg atgaatgcta ctctcaagga 60
ctgtgacctg ccagcagctg acagctcgcc atcatggaag gcgaggntgt agaggacgac 120
ctcatcttta ccagcaagaa gtcactcttt gggaagatca aatcatttac ctccaagagg 180
actcctgatg gatttnactc agtgccgctg aagacatcct caggaggccc agacatggac 240
ctgtgagagg cactgcctgc ctcacctgct tcct 274

<210> 12
<211> 245
<212> DNA
<213> Homo sapiens

<400> 12
ccaagccgaa aatctgtagc gaggaccttg agggggcagt gaagctgctg cctctggtgt 60
gaagaccac tgcccaccct gcaaccagg cttottcaaa accaacaaca gcacctgcca 120
gccctgccc tatggttcct actccaatgg ctcagactgt acccgctgcc ctgcaggac 180
tgaacctgct gtgggatttg aatacaaatg gtggaacacg ctgcccacaa acatgggaaa 240
cgacc 245

<210> 13
<211> 292
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (202)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (245)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (246)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (291)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (292)
<223> n equals a,t,g, or c

<400> 13
ggcanagga atttgactca gtgccgctga agacatcctc aggaggccca gacatggacc 60
tgtgagaggc actgcctgcc tcacctgcct cctcaccttg catagcacct ttgcaagcct 120
gcgggaaattt ggggtgccagc atcctgcaac acccactgct gggaaatctc ttcattgtgg 180
ccttatcaga tgtttgaatt tnagatcttt ttttatagag tacccaaacc ctcctttctg 240

cttgnntcaa acctgccaaa tatacccaca ctttgtttgt aaaaaaaaaa nn

292

<210> 14
<211> 220
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (164)
<223> n equals a, t, g or c

<400> 14
atcttctttt ataggtccaa tgatgtgacc cagtcttgca gttctgggag atcaaccacc 60
atccgcgtca ggtgcagtcc acagaaaact gtccctggaa gtttgctgct gccaggaacg 120
tgctcagatg ggacctgtga tggetgcaac ttccacttcc tgtnggagag cgcggctgct 180
tgcccgtct gtcagtggc tgactaccat gctatcgta 220

<210> 15
<211> 427
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (77)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (234)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (260)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (268)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (271)
<223> n equals a,t,g, or c

<220>

<221> misc_feature
 <222> (272)
 <223> n equals a,t,g, or c

 <220>
 <221> misc_feature
 <222> (275)
 <223> n equals a,t,g, or c

 <220>
 <221> misc_feature
 <222> (305)
 <223> n equals a,t,g, or c

 <220>
 <221> misc_feature
 <222> (308)
 <223> n equals a,t,g, or c

 <220>
 <221> misc_feature
 <222> (331)
 <223> n equals a,t,g, or c

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 <221> misc_feature
 <222> (353)
 <223> n equals a,t,g, or c

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 <221> misc_feature
 <222> (359)
 <223> n equals a,t,g, or c

 <220>
 <221> misc_feature
 <222> (368)
 <223> n equals a,t,g, or c

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 <221> misc_feature
 <222> (372)
 <223> n equals a,t,g, or c

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 <221> misc_feature
 <222> (381)
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 <220>
 <221> misc_feature
 <222> (388)
 <223> n equals a,t,g, or c

 <220>
 <221> misc_feature
 <222> (398)
 <223> n equals a,t,g, or c

 <220>

<221> misc_feature
<222> (400)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (427)
<223> n equals a,t,g, or c

<400> 15
aattcggcag agctcagaca atgacttcat gattctcact ctgnttgtgc caggatttag 60
acctccgcag tcggtgntgg cagacacaga gaataaagag gtggccagaa tcacatttgt 120
ctttgagacc ctctgttctg tgaactgtga gctctacttc atgggtgggtg tggaattcta 180
gggaccaaca cttcctgtgg aggacgtggg aaagggtcca aagggcaaac agtnccttat 240
tacctgacat gcattgaggn aggaacantt nncnnggagg tttcaactgg ggcctttccc 300
gaggnacnac ttttttcatg gagggccaag ncaggggagt tacaacccat tgnacgttng 360
gccaaggntc tnatttccat ncaatgtnc accaatgntn atggaanggg tggtggggcc 420
ttgcttn 427

<210> 16
<211> 333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (76)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (80)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (85)

aaagagggtgg ccagantcan atttnttttt aaaaccctct gtntctgtgaa actgtgaagc 120
tctacttgna tgggtgggtgt gaaattctag gnaccaacac tcctgtggag nacgtggaaa 180
aggttccaaa ggcaaacagt cctataccta catcattgaa ggaggaacac taccacgagg 240
ttgnacctgg gcccttccan agggaccant tttcnatgag ggcaagcagg gangtacacc 300
attgagngtt gcccaggtn tattccttca atg 333

<210> 17
<211> 70
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (40)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (60)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (66)
<223> n equals a,t,g, or c

<400> 17
ggcacaggca aagattattt ctacacacac acggcctgcn atgccaacgg agagacacan 60
ctcatntaca 70

<210> 18
<211> 568
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (396)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (465)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (472)
<223> n equals a,t,g, or c

<220>
<221> misc_feature

<222> (480)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (505)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (545)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (549)
<223> n equals a,t,g, or c

<400> 18
gcttcagtgt gcttgctcat ggcattgaatg ctatgtggac agcccaagcc ataccagaa 60
tcaccttaat tccaactttt tgagggttcag caattggagg tggcaattgg ctttgcattt 120
taaagtattt cgggttaaagg tgaagtgaag gattttcgtc tttataattt ctgttcggcc 180
atggcaaata ccatagttga gtatttgctt caggagagtt ctttttacag ttttactttt 240
caatgctgag gcatatttct ttgagcactg tgcttttatg tgtctttcta caaagggggtt 300
attgggtcagt ggaagaacaa agtacacttg ataaaaacat tttcaacata cattgagcct 360
aaacagcagt taagttgtct cttaatgaac tagcanaaaa aaaaaatgta gtttttgttt 420
gtaaggaagg ggaggtattt cctgagaatg aatttttttt ttttnggaaa cnggtttctn 480
tccataacct tgcttggatt ttacnggagg gaccctggga aaaaaatttt tcctccaaaa 540
ttttnaaanc cggttttgaa aggggttca 568

<210> 19
<211> 554
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (396)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (473)
<223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (494)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (541)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (542)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (548)
 <223> n equals a,t,g, or c

<400> 19

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 tcaccttaat tccaactttt tgagggttcag caattggagg tggcaattgg ctttgcattt 120
 taaagtattt cgggttaaagg tgaagtgaag gattttcgtc tttataattt ctgttcggcc 180
 atggcaaata ccatagttga gtatttgctt caggagagtt ctttttacag ttttactttt 240
 caatgctgag gcatatttct ttgagcactg tgcttttatg tgtctttcta caaagggggtt 300
 attggtcagt ggaagaacaa agtacacttg ataaaaacat tttcaacata cattgagcct 360
 aaacagcagt taagttgtct ctaaatgaac tagcanaaaaa aaaaaangta gtttttgttt 420
 gtaaggaagg ggaggtattt cctgagaatg aatttttttt tttttggata acnggttttc 480
 tctccataaa cctngcttgg attttacagg agggaccctg ggaaaaaaat ttttcctcca 540
 nnattttnaa atcc 554

<210> 20
 <211> 310
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (83)
 <223> n equals a,t,g, or c

<400> 20
 ctgagtatgc ctctttctat tgaaatgtca attcaatccc agctttctca ccaccgttcc 60
 cctttgattc tttctcaatt gtntttttgc ctttagctcc cacctataca tctcatgctc 120
 agagaaaaac aagttcctta gaggttgat tctttattct ccaagaatct gtctgaaact 180

tgtacagcta gttcctgtcc cacaactatt aagtgggttta ttaagtacat taggcagaat 240
 gtgcacttca tcaccagggtt ctagctctgg caaaggagtg ctgtctacag caaggatttt 300
 tgcttttaga 310

<210> 21
 <211> 546
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (317)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (340)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (351)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (389)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (398)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (428)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (429)
 <223> n equals a,t,g, or c

<220>
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 <222> (433)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (452)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (468)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (483)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (534)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (541)
 <223> n equals a,t,g, or c

<400> 21
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 ttaccggcct tcccaccatg gattgccaag aaaatgagta ctgggaccaa tggggacggt 120
 gtgtcacctg ccaacgggtgt ggtcctggac aggagctatc caaggattgt gggttatggag 180
 aggggtggaga tgcctactgc acagcctgcc ctctctgcag gtacaaaagc agctggggcc 240
 accacaaatg tcagagttgc atcacctgtg ctgtcatcaa tcgtgttcag aagggtccaac 300
 tgcacagcta acctctnatg ctgtctgtgg ggatgtttgn cccaagttct naccgaaaag 360
 acacgccatg ggaaggctgg caggaccang aatggccntc ccgtggcaga aagccagacc 420
 ccccaacnnc tgnaggttcc aatgtggcct tnccatttgg aagcttantg ggaaggcaga 480
 tgncaacca aagtggcccc ttcagggagg ccaaatttg ttggcaatgg gtgnagcagc 540
 ntgccca 546

<210> 22
 <211> 474
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (308)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (315)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature
 <222> (333)
 <223> n equals a,t,g, or c

<220>
 <221> misc_feature

<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (431)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (436)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (444)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (473)
<223> n equals a,t,g, or c

<400> 22
cgcgctgagg tggatttgta ccggagtccc atttgggagc aagagccatc tactcgtccg 60
ttaccggcct tcccaccatg gattgccaag aaaatgagta ctgggaccaa tggggacggg 120
gtgtcacctg ccaacgggtg ggtcctggac aggagctatc caaggattgt gggttatggag 180
aggggtggaga tgcctactgc acagcctgcc ctctctgcag tacaaaagca gctggggcca 240
ccacaaatgt cagagttgca tcacctgtgc tgtcatcaat cgtgttcaga aggttcaact 300
gcacagtnac ctctnatgct gtctgtgggg gangggtttgc ccaagtttct aaccgaaaga 360
cacgccattg gaaggctgcc aggaccaagg atggcatccc gtggcacaaa gncagacccc 420
caacttctga nggtncaaaa gtgnctttcc aattggagct taatgggagg cana 474

<210> 23
<211> 24
<212> DNA
<213> Homo sapiens

<400> 23 24
cgcccatgga tggaccaaag tacc

<210> 24
<211> 24
<212> DNA
<213> Homo sapiens

<400> 24 24
cgcccatgga tgagtactgg gacc

<210> 25

<211> 34
<212> DNA
<213> Homo sapiens

<400> 25
gcagcatcta gagcggcact gagtcaaata catc

34

<210> 26
<211> 26
<212> DNA
<213> Homo sapiens

<400> 26
cgcaagcttc attcaggccc ctgctg

26

<210> 27
<211> 28
<212> DNA
<213> Homo sapiens

<400> 27
cgcgatcca tggatggacc aaagtacc

28

<210> 28
<211> 28
<212> DNA
<213> Homo sapiens

<400> 28
cgcgatcca tggatgagta ctgggacc

28

<210> 29
<211> 27
<212> DNA
<213> Homo sapiens

<400> 29
cgcggtaccg cggcactgag tcaaata

27

<210> 30
<211> 26
<212> DNA
<213> Homo sapiens

<400> 30
cgcggtaccc attcaggccc ctgctg

26

<210> 31
<211> 27
<212> DNA
<213> Homo sapiens

<400> 31
cgcgatcca tggaccaaag tacccaa

27

<210> 32
<211> 57
<212> DNA
<213> Homo sapiens

<400> 32
cgctctagat caagcgtagt ctgggacgtc gtagggtag cggcactgag tcaaatac 57

<210> 33
<211> 56
<212> DNA
<213> Homo sapiens

<400> 33
cgctctagat caagcgtagt ctgggacgtc gtagggtag attcaggccc ctgctg 56

<210> 34
<211> 33
<212> DNA
<213> Homo sapiens

<400> 34
cgcggtaccg ccatcatgga ccaaagtacc aat 33

<210> 35
<211> 27
<212> DNA
<213> Homo sapiens

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 85

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 Ala Gly Glu Phe Leu Asp Met Lys Asp Gln Ser Cys Lys Pro Cys Ala 110
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 Glu Gly Arg Tyr Ser Leu Gly Thr Gly Ile Arg Phe Asp Glu Trp Asp 125
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gag ctg ccc cat ggc ttt gcc agc ctc tca gcc aac atg gag ctg gat 489
 Glu Leu Pro His Gly Phe Ala Ser Leu Ser Ala Asn Met Glu Leu Asp 140
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gac agt gct gct gag tcc acc ggg aac tgt act tcg tcc aag tgg gtt 537
 Asp Ser Ala Ala Glu Ser Thr Gly Asn Cys Thr Ser Ser Lys Trp Val 160
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ccc cgg ggc gac tac atc gcc ttc aac acg gac gaa tgc aca gcc aca 585
 Pro Arg Gly Asp Tyr Ile Ala Phe Asn Thr Asp Glu Cys Thr Ala Thr 175
 165

ctg atg tac gcc gtc aac ctg aag caa tct ggc acc gtt aac ttc gaa 633
 Leu Met Tyr Ala Val Asn Leu Lys Gln Ser Gly Thr Val Asn Phe Glu 190
 180

tac tac tat cca gac tcc agc atc atc ttt gag ttt ttc gtt cag aat 681
 Tyr Tyr Tyr Pro Asp Ser Ser Ile Ile Phe Glu Phe Phe Val Gln Asn 205
 195

gac cag tgc cag ccc aat gca gat gac tcc agg tgg atg aag acc aca 729
 Asp Gln Cys Gln Pro Asn Ala Asp Asp Ser Arg Trp Met Lys Thr Thr 220
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gag aaa gga tgg gaa ttc cac agt gtg gag cta aat cga ggc aat aat 777
 Glu Lys Gly Trp Glu Phe His Ser Val Glu Leu Asn Arg Gly Asn Asn 240
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 Val Leu Tyr Trp Arg Thr Thr Ala Phe Ser Val Trp Thr Lys Val Pro 255
 245

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 Lys Pro Val Leu Val Arg Asn Ile Ala Ile Thr Gly Val Ala Tyr Thr 270
 260

tca gaa tgc ttc ccc tgc aaa cct ggc acg tat gca gac aag cag ggc 921
 Ser Glu Cys Phe Pro Cys Lys Pro Gly Thr Tyr Ala Asp Lys Gln Gly 285
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 Ser Ser Phe Cys Lys Leu Cys Pro Ala Asn Ser Tyr Ser Asn Lys Gly 300
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gaa act tct tgc cac cag tgt gac cct gac aaa tac tca gag aaa gga 1017
 Glu Thr Ser Cys His Gln Cys Asp Pro Asp Lys Tyr Ser Glu Lys Gly 320
 305

gca agc agg aag tac acc aat gac gtt gcc aag atc tac tcc atc aat 1785
Ala Ser Arg Lys Tyr Thr Asn Asp Val Ala Lys Ile Tyr Ser Ile Asn
565 570 575

gtc acc aat gtt atg aat ggc gtg gcc tcc tac tgc cgt ccc tgt gcc 1833
Val Thr Asn Val Met Asn Gly Val Ala Ser Tyr Cys Arg Pro Cys Ala
580 585 590

cta gaa gcc tct gat gtg ggc tcc tcc tgc acc tct tgt cct gct ggt 1881
Leu Glu Ala Ser Asp Val Gly Ser Ser Cys Thr Ser Cys Pro Ala Gly
595 600 605

tac tat att gac cga gat tca gga acc tgc cac tcc tgc ccc cct aac 1929
Tyr Tyr Ile Asp Arg Asp Ser Gly Thr Cys His Ser Cys Pro Pro Asn
610 615 620

aca att ctg aaa gcc cac cag cct tat ggt gtc cag gcc tgt gtg ccc 1977
Thr Ile Leu Lys Ala His Gln Pro Tyr Gly Val Gln Ala Cys Val Pro
625 630 635 640

tgt ggt cca ggg acc aag aac aac aag atc cac tct ctg tgc tac aat 2025
Cys Gly Pro Gly Thr Lys Asn Asn Lys Ile His Ser Leu Cys Tyr Asn
645 650 655

gat tgc acc ttc tca cgc aac act cca acc agg act ttc aac tac aac 2073
Asp Cys Thr Phe Ser Arg Asn Thr Pro Thr Arg Thr Phe Asn Tyr Asn
660 665 670

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Phe Ser Ala Leu Ala Asn Thr Val Thr Leu Ala Gly Gly Pro Ser Phe
675 680 685

act tcc aaa ggg ttg aaa tac ttc cat cac ttt acc ctc agt ctc tgt 2169
Thr Ser Lys Gly Leu Lys Tyr Phe His His Phe Thr Leu Ser Leu Cys
690 695 700

gga aac cag ggt agg aaa atg tct gtg tgc acc gac aat gtc act gac 2217
Gly Asn Gln Gly Arg Lys Met Ser Val Cys Thr Asp Asn Val Thr Asp
705 710 715 720

ctc cgg att cct gag ggt gag tca ggg ttc tcc aaa tct atc aca gcc 2265
Leu Arg Ile Pro Glu Gly Glu Ser Gly Phe Ser Lys Ser Ile Thr Ala
725 730 735

tac gtc tgc cag gca gtc atc atc ccc cca gag gtg aca ggc tac aag 2313
Tyr Val Cys Gln Ala Val Ile Ile Pro Pro Glu Val Thr Gly Tyr Lys
740 745 750

gcc ggg gtt tcc tca cag cct gtc agc ctt gct gat cga ctt att ggg 2361
Ala Gly Val Ser Ser Gln Pro Val Ser Leu Ala Asp Arg Leu Ile Gly
755 760 765

gtg aca aca gat atg act ctg gat gga atc acc tcc cca gct gaa ctt 2409
Val Thr Thr Asp Met Thr Leu Asp Gly Ile Thr Ser Pro Ala Glu Leu
770 775 780

ttc cac ctg gag tcc ttg gga ata ccg gac gtg atc ttc ttt tat agg 2457
Phe His Leu Glu Ser Leu Gly Ile Pro Asp Val Ile Phe Phe Tyr Arg
785 790 795 800

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 Ser Asn Asp Val Thr Gln Ser Cys Ser Gly Arg Ser Thr Thr Ile
 805 810 815

cgc gtc agg tgc agt cca cag aaa act gtc cct gga agt ttg ctg ctg 2553
 Arg Val Arg Cys Ser Pro Gln Lys Thr Val Pro Gly Ser Leu Leu Leu
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 835 840 845

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 850 855 860

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 His Ala Ile Val Ser Ser Cys Val Ala Gly Ile Gln Lys Thr Thr Tyr
 865 870 875 880

gtg tgg cga gaa ccc aag cta tgc tct ggt ggc att tct ctg cct gag 2745
 Val Trp Arg Glu Pro Lys Leu Cys Ser Gly Gly Ile Ser Leu Pro Glu
 885 890 895

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 Gln Arg Val Thr Ile Cys Lys Thr Ile Asp Phe Trp Leu Lys Val Gly
 900 905 910

atc tct gca ggc acc tgt act gcc atc ctg ctc acc gtc ttg acc tgc 2841
 Ile Ser Ala Gly Thr Cys Thr Ala Ile Leu Leu Thr Val Leu Thr Cys
 915 920 925

tac ttt tgg aaa aag aat caa aaa cta gag tac aag tac tcc aag ctg 2889
 Tyr Phe Trp Lys Lys Asn Gln Lys Leu Glu Tyr Lys Tyr Ser Lys Leu
 930 935 940

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 Val Met Asn Ala Thr Leu Lys Asp Cys Asp Leu Pro Ala Ala Asp Ser
 945 950 955 960

tgc gcc atc atg gaa ggc gag gat gta gag gac gac ctc atc ttt acc 2985
 Cys Ala Ile Met Glu Gly Glu Asp Val Glu Asp Asp Leu Ile Phe Thr
 965 970 975

agc aag aat cac tct ttg gga aga tca aat cat tta cct cca aga gga 3033
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 980 985 990

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 995 1000

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tcattgtggc cttatcagat gtttgaattt cagatctttt tttatagagt acccaaacc 3263

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35 40 45
Cys Lys Glu Ser Glu Tyr His Tyr Glu Tyr Thr Ala Cys Asp Ser Thr
50 55 60
Gly Ser Arg Trp Arg Val Ala Val Pro His Thr Pro Gly Leu Cys Thr
65 70 75 80
Ser Leu Pro Asp Pro Val Lys Gly Thr Glu Cys Ser Phe Ser Cys Asn
85 90 95
Ala Gly Glu Phe Leu Asp Met Lys Asp Gln Ser Cys Lys Pro Cys Ala
100 105 110
Glu Gly Arg Tyr Ser Leu Gly Thr Gly Ile Arg Phe Asp Glu Trp Asp
115 120 125
Glu Leu Pro His Gly Phe Ala Ser Leu Ser Ala Asn Met Glu Leu Asp
130 135 140
Asp Ser Ala Ala Glu Ser Thr Gly Asn Cys Thr Ser Ser Lys Trp Val
145 150 155 160
Pro Arg Gly Asp Tyr Ile Ala Phe Asn Thr Asp Glu Cys Thr Ala Thr
165 170 175
Leu Met Tyr Ala Val Asn Leu Lys Gln Ser Gly Thr Val Asn Phe Glu
180 185 190
Tyr Tyr Tyr Pro Asp Ser Ser Ile Ile Phe Glu Phe Phe Val Gln Asn
195 200 205
Asp Gln Cys Gln Pro Asn Ala Asp Asp Ser Arg Trp Met Lys Thr Thr
210 215 220
Glu Lys Gly Trp Glu Phe His Ser Val Glu Leu Asn Arg Gly Asn Asn
225 230 235 240
Val Leu Tyr Trp Arg Thr Thr Ala Phe Ser Val Trp Thr Lys Val Pro
245 250 255
Lys Pro Val Leu Val Arg Asn Ile Ala Ile Thr Gly Val Ala Tyr Thr
260 265 270

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 Ser Ser Phe Cys Lys Leu Cys Pro Ala Asn Ser Tyr Ser Asn Lys Gly
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 Glu Thr Ser Cys His Gln Cys Asp Pro Asp Lys Tyr Ser Glu Lys Gly
 305 310 315 320
 Ser Ser Ser Cys Asn Val Arg Pro Ala Cys Thr Asp Lys Asp Tyr Phe
 325 330 335
 Tyr Thr His Thr Ala Cys Asp Ala Asn Gly Glu Thr Gln Leu Met Tyr
 340 345 350
 Lys Trp Ala Lys Pro Lys Ile Cys Ser Glu Asp Leu Glu Gly Ala Val
 355 360 365
 Lys Leu Pro Ala Ser Gly Val Lys Thr His Cys Pro Pro Cys Asn Pro
 370 375 380
 Gly Phe Phe Lys Thr Asn Asn Ser Thr Cys Gln Pro Cys Pro Tyr Gly
 385 390 395 400
 Ser Tyr Ser Asn Gly Ser Asp Cys Thr Arg Cys Pro Ala Gly Thr Glu
 405 410 415
 Pro Ala Val Gly Phe Glu Tyr Lys Trp Trp Asn Thr Leu Pro Thr Asn
 420 425 430
 Met Glu Thr Thr Val Leu Ser Gly Ile Asn Phe Glu Tyr Lys Gly Met
 435 440 445
 Thr Gly Trp Glu Val Ala Gly Asp His Ile Tyr Thr Ala Ala Gly Ala
 450 455 460
 Ser Asp Asn Asp Phe Met Ile Leu Thr Leu Val Val Pro Gly Phe Arg
 465 470 475 480
 Pro Pro Gln Ser Val Met Ala Asp Thr Glu Asn Lys Glu Val Ala Arg
 485 490 495
 Ile Thr Phe Val Phe Glu Thr Leu Cys Ser Val Asn Cys Glu Leu Tyr
 500 505 510
 Phe Met Val Gly Val Asn Ser Arg Thr Asn Thr Pro Val Glu Thr Trp
 515 520 525
 Lys Gly Ser Lys Gly Lys Gln Ser Tyr Thr Tyr Ile Ile Glu Glu Asn
 530 535 540
 Thr Thr Thr Ser Phe Thr Trp Ala Phe Gln Arg Thr Thr Phe His Glu
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 565 570 575
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ctccaatggc tcagactgta cccgctgccc tgcagggact gaacctgctg tgggatttga 180
ntacaaatgg tggaacacgc tgcccacaaa catggaaacg accgttctca gtgggatcaa 240
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ggaagtacac caatgacgtt gccaagatct actccatcaa tgccaccaat gttatgaatg 180
gcgtggcctc ctactgccgt cctgtgccc tagaagcctc tgatgtgggc tcctcctgca 240
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cagcctgcct gaccccgctca agggcaccga gtgctccttc tcctgcaacg ccggggagtt 180
tctggatatg aaggaccagt catgtaagcc atgcgctgag ggccgctact ccctcggcac 240
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atattgaccg agattcagga acctgccact cctgcccccc taacacaatt ntgaaagccc 180
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ctcatcttta ccagcaagaa gtcactcttt gggaagatca aatcatttac ctccaagagg 180
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gccctgcccc tatggttcct actccaatgg ctcagactgt acccgctgcc ctgcagggac 180
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gcggggaattt gggtgccagc atcctgcaac acccactgct gggaaatctc ttcattgtgg 180
ccttatcaga tgtttgaatt tnagatcttt ttttatagag tacccaaacc ctcctttctg 240

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292

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ctttgagacc ctctgttctg tgaactgtga gctctacttc atgggtgggtg tggaattcta 180
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tacctgacat gcattgaggn aggaacantt nncnnggagg tttcaactgg ggcctttccc 300
gaggnacnac ttttttcatg gagggccaag ncaggggagt tacaacccat tgnacgttng 360
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 agnctgggtca ccgttgaact tcggaatact actatccaga ctccatcatc atctttgaag 180
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 acagagaaaag gatgggaatt ccacagtgtg agctnaaatc gaggcaataa tgtccggttat 300
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aggttccaaa ggcaaacagt cctataccta catcattgaa ggaggaacac taccacgagg 240

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<211> 70

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<213> Homo sapiens

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<223> n equals a, t, g or c

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<221> misc_feature

<222> (66)

<223> n equals a, t, g or c

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ctcatntaca

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 35 40 45
 Tyr Lys Ser Ser Trp Gly His His Lys Cys Gln Ser Cys Ile Thr Cys
 50 55 60
 Ala Val Ile Asn Arg Val Gln Lys Val Asn Cys Thr Pro Thr Ser Asn
 65 70 75 80
 Ala Val Cys Gly Asp Cys Leu Pro Arg Phe Tyr Arg Lys Thr Arg Ile
 85 90 95
 Gly Gly Leu Gln Asp Gln Glu Cys Ile Pro Cys Thr Lys Gln Thr Pro
 100 105 110
 Thr Ser Glu Val Gln Cys Ala Phe Gln Leu Ser Leu Val Glu Ala Asp
 115 120 125
 Ala Pro Thr Val Pro Pro Gln Glu Ala Thr Leu Val Ala Leu Val Ser
 130 135 140
 Ser Leu Leu Val Val Phe Thr Leu Ala Phe Leu Gly Leu Phe Phe Leu
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 Tyr Cys Lys Gln Phe Phe Asn Arg His Cys Gln Arg Gly Gly Leu Leu
 165 170 175
 Gln Phe Glu Ala Asp Lys Thr Ala Lys Glu Glu Ser Leu Phe Pro Val
 180 185 190
 Pro Pro Ser Lys Glu Thr Ser Ala Glu Ser Gln Val Ser Trp Ala Pro
 195 200 205
 Gly Ser Leu Ala Gln Leu Phe Ser Leu Asp Ser Val Pro Ile Pro Gln
 210 215 220
 Gln Gln Gln Gly Pro Glu Met
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